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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,427	10/22/2003	Wolfgang Wolff	H 5165 PCT/US	7828

423 7590 12/14/2004

HENKEL CORPORATION  
THE TRIAD, SUITE 200  
2200 RENAISSANCE BLVD.  
GULPH MILLS, PA 19406

EXAMINER
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ELHILO, EISA B

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/691,427

Applicant(s)

WOLFF ET AL.

Examiner

Eisa B Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 11-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

- 1 This action is responsive to the amendment filed on October 11, 2004.
- 2 The cancellation of claims 6 and 10 is acknowledged. Pending claims are 1-5, 7-9 and 11-23.
- 3 The rejections of the claims under 35 U.S.C. 102(b) and 103(a) are withdrawn because of the applicant's amendment.

### NEW GROUND OF REJECTION

#### *Claim Rejections - 35 USC § 112*

- 4 The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 7-9, 11-12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7-9, 11-12 and 14 are indefinite because the claims recite the limitation "formula (I)". There is insufficient antecedent basis for this limitation in the claims because the claims are dependent on the amended claim 1.

#### *Claim Rejections - 35 USC § 103*

- 5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 13, 15, 17-22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Madrange et al. (US 5,143,518) in view of Cotteret et al. (US 5,735, 908).

Madrange et al. (US' 518) teaches a hair dyeing composition comprising oxidation dye precursors (see col. 12, line 60-61), silicone polymers of dialkyl polysiloxane such as dimethyl polysiloxane as claimed in claims 1- 4 (see col. 31, claim 12) and cationic polymer such as a co-polymer of dimethyldiallylammonium chloride with acrylamide (Merquat 550) as claimed in claim 13 (see col. 12, lines 38-45), amodimethicone as claimed in claim 5 (see col. 2, line 45), cationic homopolymer of dimethyldiallylammonium chloride (Merquat 100) primary intermediates (oxidation bases) as claimed in claim 15 (see col. 12, line 62-64), secondary intermediates (couplers) as claimed in claim 17 (see col. 12, lines 65-68), direct dyes (substantive dye) as claimed in claim 18 (see col. 14, line 17). Madrange (US' 518) also teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above to which there is added an oxidizing agent and the mixture is left on hair for a sufficient time and after which the hair is rinsed and dried wherein the reference's method is similar to those claimed in claims 19-22 (see col. 15, lines 50-68 and col. 16, lines 1-2).

Although Madrange et al. (US' 518) teaches a hair dyeing composition comprising homopolymers and co-polymers as described above, Madrange et al. (US' 518) does teach an amphoteric polymer as claimed. Further, Madrange et al. does not teach a two-component kit as claimed.

Cotteret et al. (US' 908) in analogous art of hair dyeing formulation, teaches a composition comprising amphoteric co-polymers of diallyldimethylammonium chloride/ acrylic acid (Merquat 280) as claimed in the instant claims (see col. 4, lines 53-54) and cationic polymer

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such as co-polymer of dimethyldiallylammonium chloride/acrylamide (Merquat 550) (see col. 4, lines 3-4). Cotteret et al. Also teaches a multi-compartment dyeing devices or kits which are similar to the claimed kit as claimed in claim 23 (see col. 2, lines 60-67).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Madrange et al. (US' 518) by substituting the cationic co-polymer of dimethyldiallylammonium chloride /acrylamide (Merquat 550) with the amphoteric co-polymers of diallyldimethylammonium chloride/acrylic acid (Merquat 280) as taught by Cotteret et al. (US'908) to make such a composition with a reasonable expectation of success because the primary reference of Madrange et al. (US' 518) suggests the use of the cationic co-polymer of dimethyldiallylammonium chloride/acrylamide (Merquat 550) in hair dyeing composition. The secondary reference of Cotteret et al. (US' 908) clearly teaches the equivalence between amphoteric co-polymer of diallyldimethylammonium chloride/acrylic acid (Merquat 280) (see col. 4, lines 53-54) and cationic co-polymer of dimethyldiallylammonium chloride/acrylamide (Merquat 550) (see col. 4, lines 3-4), wherein the dyeing composition is provided in a dyeing devices or kits, and, thus, a person of an ordinary skill in the art would expect that the use of amphoteric co-polymers of diallyldimethylammonium chloride/acrylic acid (Merquat 280) in a hair dyeing composition as taught by Cotteret et al. (US' 908), would be similarly useful and applicable to the analogous dyeing composition taught by the primary reference of Madrange et al. (US' 518), absent unexpected results.

5        Claims 1, 13 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millequant et al. (US 6,312,677 B1).

Millequant et al. (US' 677 B1) teaches a hair dyeing composition comprising silicone polymers (see col. 10, formula VI) and co-polymer of dimethyldiallylammonium chloride and acrylic acid (Merquat 280) (amphoteric polymer) as claimed in claims 1 and 13 (see col. 13, lines 44-49), oxidation dye precursors (primary intermediates), couplers (secondary intermediates), indole precursors and direct dyes as claimed in claims 1 and 15-18 (see col. 14, lines 23-42). Millequant et al. (US' 677) also teaches a similar method for dyeing hair comprising applying to the hair the dyeing composition as described above after diluted at the time of use with the oxidizing solution wherein the composition is allowed to act for a period of time and the hair is then rinsed as claimed in claim 19 (see col. 15, lines 59-64).

Although Millequant et al. (US' 677 B1) generally discloses a hair dyeing composition comprising oxidation dye precursors, amphoteric polymers and silicone polymers, the reference does not require such a dyeing composition with sufficient specificity to constitute anticipation.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a dyeing composition, as taught by Millequant et al, which contained oxidation dye precursors, amphoteric polymers and silicone compounds, because such a dyeing composition falls within the scope of those taught by Millequant et al. Therefore, one of an ordinary skill in the art would have had a reasonable expectation of success, because such a dyeing composition containing oxidation dye precursors, amphoteric polymers and silicone compounds is expressly suggested by the disclosure of Millequant et al. (US' 677 B1) and therefore, is an obvious formulation.

*Response to Applicant's Arguments*

7 Applicant's arguments filed on 10/ 11/ 2004 have been considered but are moot in view of the new ground(s) of rejection.

8 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo  
December 9, 2004



MARGARET EINSMANN  
PRIMARY EXAMINER  
GROUP 1100